06 March 2014

Federal Communications Commission
Washington, DC

RE: Expression of Interest- Chippewa Valley Electric Cooperative Rural Broadband Experiment
Docket No. 10-90

Greetings,

Please accept this Expression of our interest in the Rural Broadband Experiment.

Background

Located in Northern Wisconsin, Chippewa Valley Electric Cooperative (CVEC), was established in 1936 as a nonprofit Member-owned electric utility. We maintain over 1,300 miles of line to provide reliable electric service to our 8,500 accounts.

CVEC is one of 837 distribution cooperatives across 47 states providing service to 42 million Americans and 18.5 million businesses, homes, schools, churches, farms, irrigation systems and other establishments. As an industry, we own and maintain 42% of the nation's distribution lines. That said, only 12% of Americans are customers of ours. Whereas publicly owned utilities (municipals) average 48 consumers per mile and investor-owned utilities average 34 customers per mile, electric cooperatives serve an average of 7.4 members per mile. These are the Cooperative Members who are in need of a reliable and affordable broadband solution.

The Undertaking

We are currently implementing Landis & Gyr's Gridstream Automatic Meter Reading (AMR) system. Usage, outage, and other pertinent information is transmitted from the Meter through other meters and/or routers to strategically located Collectors. The Collectors require a broadband connection to our offices in Cornell, WI for billing, outage detection, power quality, and other services. The Collectors are currently connected via a VPN over broadband DSL and cellular services. These services are costly to install, configure, and maintain. The best solution is a private network using fiber optic cable. We also require a secure private network connection to our substations for SCADA, security, and general communications.

The broadband options available to CVEC as well as the majority of our Members are DSL, Satellite, or 3/4G; each with their own limitations. DSL is slow, erratic, and expensive. The latency and volume restrictions of Satellite are unacceptable. 3/4G cellular is unreliable during peak times, and the volume restrictions are cost prohibitive.

Chippewa Valley Electric Cooperative
P.O. Box 575, Cornell, WI 54732
715.239.6800 715.239.4290 FAX
800.300.6800 www.cvecoop.com

DSL is the only broadband option available to our office in the city of Cornell. We subscribe to a 10Mb/s package, but are often times limited to 3Mb/s or less. With our need to access “cloud” resources for running our business the DSL service is simply not sufficient. This limitation along with the need for private connectivity to our substations for SCADA, AMR, security, and general communications has prompted us to design our own solution.

With the assistance of Power Systems Engineering, Inc. (www.powersystem.org) and Teleco Systems Inc. (http://telecorf.com/) we have designed a solution to address our network requirements, and provide reliable and affordable broadband service to our Members.

The attached drawing details the protected routes of the 177 mile network backbone/infrastructure. These routes are based on CVEC’s substation locations.

The estimated cost of the 10 node, 10 GHz, scalable network backbone is $ 7 million. Plans are in place to finance approximately 35% of the project.

The network infrastructure/backbone is an asset with unlimited potential for our Members. It is CVEC’s intent to offer fiber-to-the-premise (FTTx) to bring high speed reliable and affordable broadband services to our Members. WiMax links will be used for redundancy and some “last mile” connectivity. WiMax will also be used to supplement communications for local government and communications with our crew.

It is our intent to offer “broadband without limits”. An entry level residential broadband connection will offer 50 MB/s Up / 20MB/s Down for
$ 50/month. Once the infrastructure is in place, the service offerings (applications) are virtually unlimited.

Timing

The timing of this project coincides with the construction of our new headquarters being constructed in Cornell, WI. The facility will include a high security Network Operations Center (NOC) and provisions for a shared data center. The shared data center will provide options for businesses to have off site storage.

CVEC is ready to begin construction as soon as funds are secured. There is an immediate need, and we have the solution. We will secure an ETC license and other certifications when funding is approved.

CVEC receives inquiries regarding broadband services on a regular basis. We are currently conducting a customer satisfaction survey of our Members, and are asking specific questions regarding broadband.

We anticipate full deployment of FTTx to take 24-36 months, at a cost of $ 32 million.

Service Area

Our full deployment area includes eligible portions of Chippewa, Rusk, Taylor, and Dunn counties. CVEC will focus on rural townships and the Town of Holcombe. Our Member density is 5.5 Members per route mile. Our FTTx service area need not be limited to our service territory for electric service.

There are at least 39 critical community facilities and public safety entities consisting of 5 schools, 2 libraries, 4 medical/healthcare providers, 13 public safety entities, and 15 governmental facilities. The area to be served is shown on the attached map.

Additionally, we intend to work closely with the Chippewa Valley Internetworking Consortium (CINC) as well as Dairyland Power Cooperative to minimize the duplication of efforts and expenses.

Once the infrastructure is in place and stable, we may choose to offer services, or applications. Possible service and applications may include voice and video. We currently offer Med-A-Lert, a Personal Emergency Reporting System, and would utilize the network to offer and expand this service.

Our strategically located substations and proven business model position us to be a premier broadband service provider, offering broadband and other wireless services to our Members. There are countless other cooperatives that have the same needs as CVEC. We could serve as a business model for other electric cooperatives across the country.

Recurring costs include salaries and support staff, and are estimated at 5% of the initial investment.

Our Request

CVEC continues to refine our project requirements. The fully deployed network cost is $ 39 million; $ 7 million for the protected ring between substations, and $ 32 million for FTTx. Given the 8,465 Members we will require approximately $ 2,900 per passing to fully fund the project.

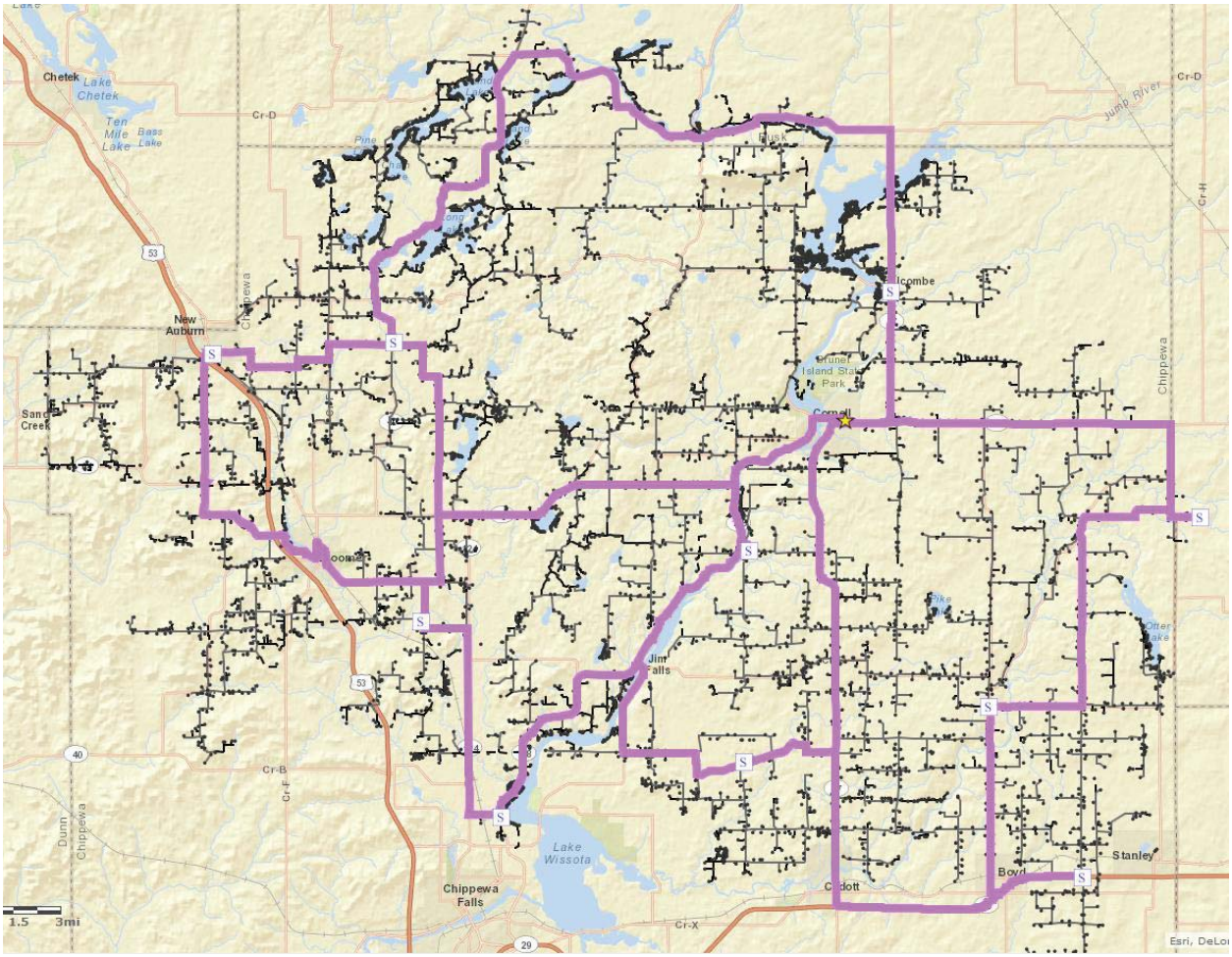
CVEC is assuming a conservative 60% take rate, and predicts a positive net income in year 5.

Total Estimated Project Cost:	$ 39 million
CVEC Investment	$ 2 million
Ideal FCC Investment	$ 37 million
Leveraging Opportunities	FCC Rural Experiment
	Connect America Fund
	CINC (dark fiber swap, Internet access)
	Regional Economic Development Groups

Respectfully Submitted,

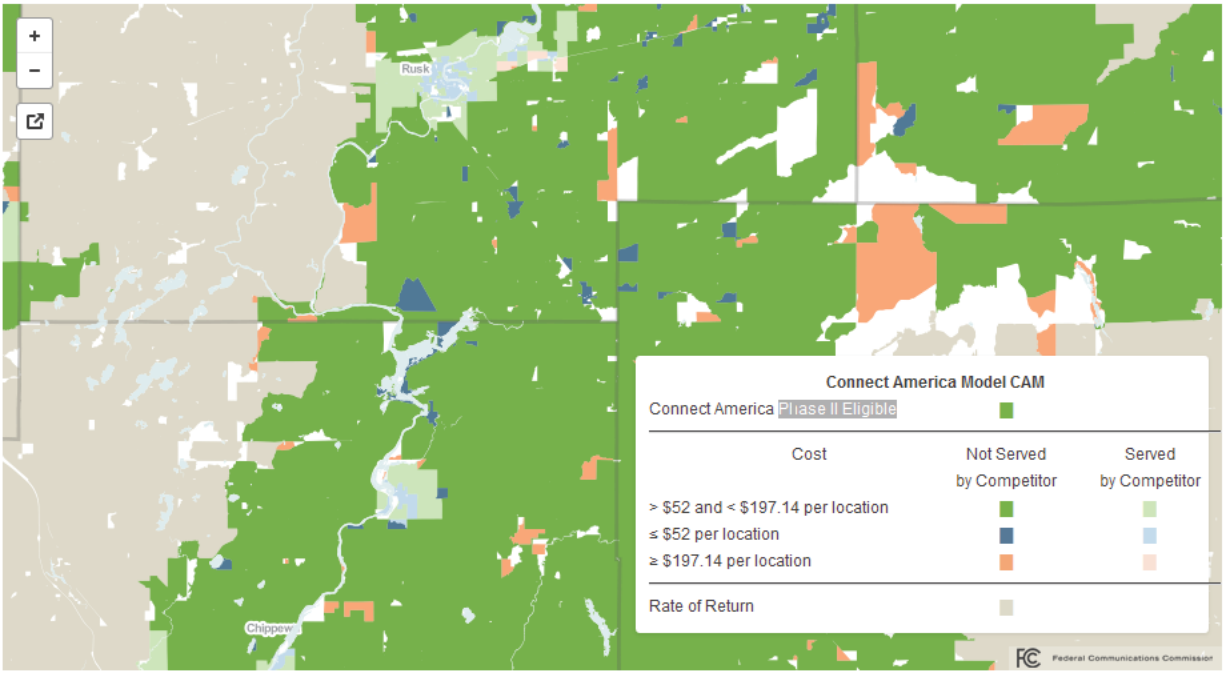
Chippewa Valley Electric Cooperative
Russ Falkenberg, Director of Member Services

Enclosure:



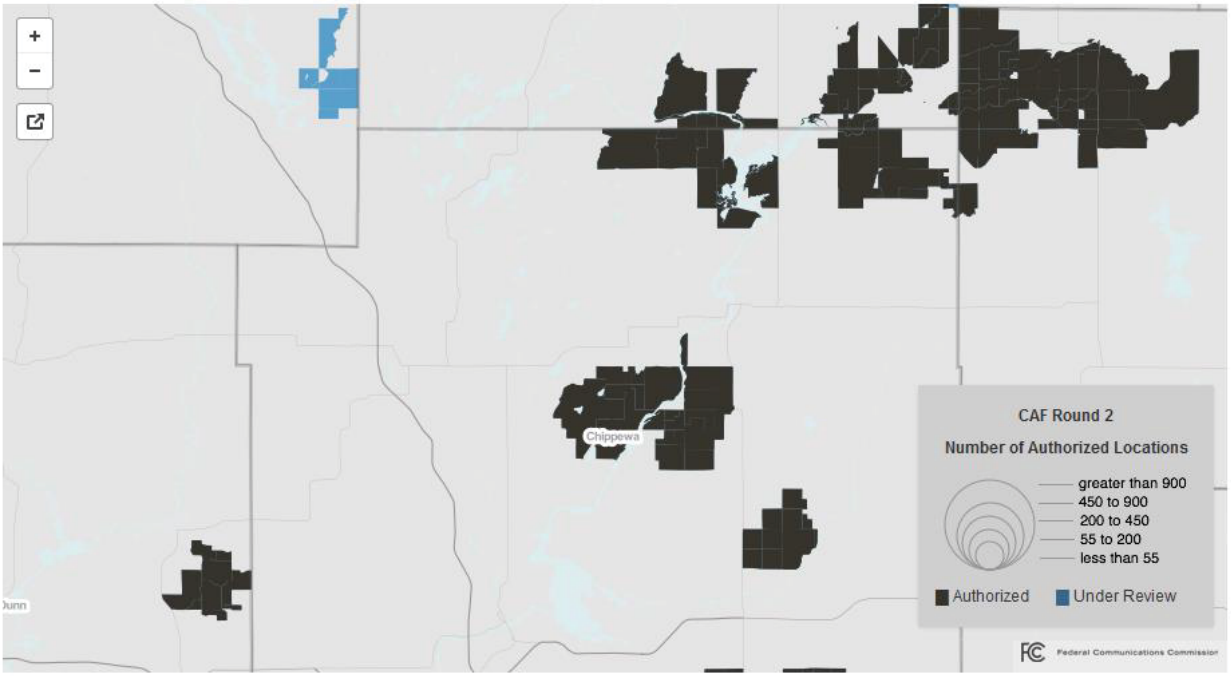
Chippewa Valley Electric Cooperative
Network Backbone/Infrastructure
Approximately 177 Miles

FCC - Connect America Fund Phase II – CAM v4.0 Illustrative Map with Funding Threshold of $52



FCC
Connect America Fund, Phase II
Eligible Areas

Connect America Fund (CAF) Phase I Round Two



Connect America Fund
Phase I, Round 2